Software

- Programs are called software.
- Softwares can be classified into System software and application software.

System Software	Application Software
• It represents programs that allow the hardware run properly. • It controls and manages hardware. • It is collection of programs that enable users to interact with hardware components efficiently and conveniently. • It provide general environment in which programmers can create specific applications to suit their needs	• These are designed to solve a particular application. • It is collection of programs written for specific application such as Library system, Inventory System, Spread Sheets, Database Systems, desktop publishing, games, browsers etc. • It uses the services provided by the system software to interact with hardware.

System Software	Application Software
• It is machine dependent. System programmer must understand the architecture of the machine to develope system software. • It interact hardware directly. • Examples are OS, Compiler or Interpreter.	• It is machine independent. Application programmer need not to know the structure of the machine • It does not interact with hardware directly

Compiler	Interpreter
• Compiler Translates Whole Program from High Level Language to Low Level Language. • It Shows all possible syntax errors in the program. • When all the syntax errors are corrected the source program is converted into object program. • Neither Source Program nor the compiler is required for execution. • More memory is required.	• Interpreter translates one instruction at a time. • It displays all possible errors in one statement. • When there is no errors in a statement, it is translated and executed, then it shows errors in next statement. • Both source program and interpreter is required for execution. • Less memory is required.

UNIX	DOS
• It is multi user time sharing OS. • It supports user id, group id for users • UNIX supports Login Procedure. • It supports visual display and graphics. • It supports networking of computers • It provides safety from virus since it is firewalled. • It provides path names longer than 260 bytes maximum upto 524288 bytes.	• It is single user single tasking OS. • It does not support user id, group users. • DOS does not supports Login Procedure. • It does not supports visual display and graphics • It does not supports networking of computers • It does not provide any security • DOS does not support full path names longer than 260 bytes.

WINDOWS	DOS
• It is single user multi tasking OS. • It is a Graphics User Interface. • It is powerful and fast OS. • Virtually all the DOS commands are available in windows. • It support firewall security and networking • It is costly.	• It is single user single tasking OS • It is character User Interface. • It is less powerful slow OS. • All the commands of windows are not available in Dos • It does not support any security and networking • It is cheap.